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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,633	03/31/2004	Yoshiharu Tanaka	PTGF-03090	3832

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MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER

NEGRON, ISMAEL

ART UNIT	PAPER NUMBER
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2885

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/813,633	Applicant(s) TANAKA ET AL.	
	Examiner Ismael Negron	Art Unit 2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Response to Amendment

2. Applicant's amendment filed on December 28, 2006 has been entered. Claims 5, 14 and 25-27 have been amended. No claim has been cancelled, or been added. Claims 5-27 are still pending in this application, with claims 5, 14 and 26 being independent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 5-13 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of SOMMERS (U.S. Pat. 6,674,096).
4. MISHIMAGI discloses a vehicle rear view mirror having:
- **a housing (as recited in claims 5 and 26), Figure 3, reference number 22;**
 - **a mirror (as recited in claims 5 and 26), Figure 3, reference number 18;**
 - **the mirror being disposed on the back side of the housing (as recited in claims 5 and 26), as seen in Figure 3;**
 - **one LED including a light emitting element (as recited in claims 5 and 26), Figure 3, reference number 27;**
 - **a light guiding member (as recited in claims 5 and 26), Figure 1, reference number 26;**
 - **the housing having an opening formed at part of its outer surface (as recited in claims 5 and 26), Figure 2, reference number 22b;**
 - **the light guiding member being attached to the housing and exposed in the opening (as recited in claims 5 and 26), column 6, line 66 to column 7, line 1;**

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- **the LED being disposed in the light guiding member (as recited in claims 5 and 26), as seen in Figure 1;**
- **the light-guiding member allowing light plane-radiated from the LED to be transmitted through and to be reflected on its inner surface to be radiated in a desired direction (as recited in claims 5 and 26), column 7, lines 40-49;**
- **the light guiding member having a front face formed along the outer shape of the housing (as recited in claim 6), inherent, as seen in Figure 1;**
- **the light guiding member having a back face opposite to the front face (as recited in claim 6), inherent, as seen in Figure 1;**
- **the back face being provided with a step portion to diffuse light radiated from the LED (as recited in claim 6), as seen in Figure 1;**
- **the step portion functioning as a reflection surface that reflects light radiated from the LED or light reflected on at least part of the front face and back face of the light guiding member in a desired direction to allow the light to be externally radiated from the front face the light**

guiding member (as recited in claim 7), column 7, lines 28-34;

- **the at least one LED being disposed between the front face and back face of the light guiding member (as recited in claim 8), as evidenced by Figure 1;**
- **the at least one LED being disposed near the outer edge of the housing (as recited in claim 8), as seen in Figure 1;**
- **the light guiding member having a V-shaped notch on the back face (as recited in claim 9), Figure 1, reference number 26c;**
- **the notch serving to diffuse light radiated from the LED (as recited in claim 9), column 7, lines 40-49;**
- **the light guiding member having one end that is extended near the mirror on the back side of the housing (as recited in claim 10), as seen in Figure 1;**
- **the housing being attached to a door or an engine hood of the vehicle, or to a motorcycle as the vehicle (as recited in claim 11), as seen in Figure 4;**
- **the LED being turned on in conjunction with a blinker lamp and/or parking lamp (as recited in claim 13), column 8, lines 26-37;**

- **the LED being fitted into the light guiding member (as recited in claims 24 and 27), as seen in Figure 1;**
- **the light guiding member having a thickness (as recited in claims 25 and 27), inherent, as any three-dimensional entity has a thickness; and**
- **an emission point of the LED being located at a middle of the thickness of the light guiding member (as recited in claims 25 and 27), as evidenced by Figure 1.**

5. MISHIMAGI discloses all the limitations of the claims, except:

- the LED plane-radiating light in a direction nearly vertical to the optical axis of the light emitting element (as recited in claims 5 and 26);
- the LED emitting amber or white light (as recited in claim 12).

6. SOMMERS discloses an illumination device having:

- **an LED (as recited in Claim 5), Figure 2, reference number 10;**
- **the LED including a light emitting element (as recited in Claim 5), Figure 2, reference number 12;**

- **the LED plane-radiating light in a direction nearly vertical to the optical axis of the light emitting element (as recited in claim 5), as seen in Figure 2; and**
- **the LED having a wide range of available emission colors, such as white or amber, column 1, lines 23-26.**

7. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the patented LED illumination device of SOMMERS as the LED of the vehicle rearview mirror of MISHIMAGI, to simplify such rear view mirror structure by eliminating the need for an additional support portion perpendicular to the light guiding member (as seen in Figure 1) and to increase the efficiency of the coupling between the LED and the light guiding member, as per the teachings of SOMMERS.

8. Regarding the LED emitting amber or white light (as recited in claim 12), it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use amber LED for signaling an intended turn direction of the vehicle, as suggested by MISHIMAGI (column 8, lines 26-37), as the use of such color is not only old and well known in the art, but standard for such direction indicator lamps.

9. Claims 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of YAN (U.S. Pat. 5,865,529).

10. MISHIMAGI discloses a vehicle rear view mirror having:

- **a housing (as recited in claim 14), Figure 3, reference number 22;**
- **a mirror (as recited in claim 14), Figure 3, reference number 18;**
- **the mirror being disposed on the back side of the housing (as recited in claim 14), as seen in Figure 3;**
- **at least one LED (as recited in claim 14) including a light emitting element (as recited in claim 14), Figure 3, reference number 27;**
- **the LED radiating light in the optical axis direction of the light emitting element (as recited in Claim 14), as seen in Figure 1;**
- **a reflector (as recited in Claim 14), Figure 1, reference number 23;**
- **the reflector being disposed along the shape of the housing at part of the outer surface of the housing (as recited in Claim 14), as seen in Figure 1;**
- **the reflector having at least one reflection surface which allows light plane-radiated from the LED disposed in the reflection surface to be reflected in the front or side**

direction of the vehicle (as recited in Claim 14), as seen in Figure 1;

- **the reflector has two reflection surfaces for forward lighting and for sideward lighting (as recited in Claim 15), as seen in Figure 1;**
- **the reflector having a diffusion surface to diffuse incident light on its inner surface, column 7, lines 28-34;**
- **the housing being attached to a door or an engine hood of the vehicle, or to a motorcycle as the vehicle (as recited in Claim 19), as seen in Figure 4;**
- **the LED is turned on in conjunction with a blinker lamp and/or parking lamp (as recited in Claim 21), column 8, lines 26-37;**
- **the LED being disposed inside the housing such that light radiated from the light emitting element is directly radiated to the back of the vehicle (as recited in Claim 22), as evidenced by Figure 1; and**
- **the reflector having a partially reduced thickness such that light radiated from the light emitting element is directly radiated to the back of the vehicle (as recited in Claim 23), as seen in Figure 1.**

11. MISHIMAGI discloses all the limitation of the claims, except:

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- the LED radiating light in a direction nearly vertical to the optical axis direction (as recited in Claim 14);
- the reflector having a cover on its front face (as recited in Claim 16);
- the cover having a diffusion surface to diffuse incident light on its inner surface (as recited in Claim 17);
- the cover being transparent or semi-transparent (as recited in Claim 18);
- the cover being colored in amber or colorless (as recited in Claim 18);
- the LED emitting amber or white light (as recited in Claim 20).

12. YAN discloses an illumination device having:

- **an LED (as recited in Claim 14), Figure 6, reference number 14;**
- **the LED including a light emitting element (as recited in Claim 14), Figure 6, reference number 140;**
- **the LED plane-radiating light in a direction nearly vertical to the optical axis of the light emitting element (as recited in claim 14), as seen in Figure 6; and**
- **the LED having a wide range of available emission colors, such as white or amber, column 3, lines 49-51.**

13. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the patented LED illumination device of YAN as the LED of the vehicle rearview mirror of MISHIMAGI, to simplify such rear view mirror structure by eliminating the need for an additional support portion perpendicular to the light guiding member (as seen in Figure 1) and to increase the efficiency of the coupling between the LED and the light guiding member, as per the teachings of YAN.

14. Regarding the cover, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to include a cover in the patented vehicle rear view mirror of MISHIMAGI to protect the reflector from scratches and contaminants.

15. Regarding the cover being transparent or semi-transparent, colored in amber or colorless (as recited in Claim 18), or the LED emitting amber or white light (as recited in Claim 20), it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made for the vehicle rear view mirror of MISHIMAGI and YAN to use the color amber for signaling an intended turn direction of the vehicle, as suggested by MISHIMAGI (column 8, lines 26-37), as the use of such color is not only old and well known in the art, but standard for such direction indicator lamps.

Response to Arguments

16. Applicant's arguments filed December 28, 2006 have been fully considered but they are not persuasive.

17. Regarding the Examiner's rejection of claims 5 and 26 under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of SOMMERS (U.S. Pat. 6,674,096), the applicant argues that the cited combination references fail to individually disclose, or even suggest when combined, all the features of the claimed invention, specifically the LED disposed in a light guiding member. The applicant further argues that there is no motivation in the Prior Art to combine the cited references. The applicant even further argues that replacing all of the light sources of MISHIMAGI with the LED of SOMMERS, as supposedly proposed by the Examiner, would require substantial structural modification of the patented structure of MISHIMAGI, and would destroy the MISHIMAGI reference by rendering inappropriate for its intended use.

18. In response to applicant's arguments that MISHIMAGI and SOMMERS failed to disclose individually, or suggest in combination, the LED disposed in a light guiding member, the applicant is respectfully advised that while the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow. *In re American Academy of Science Tech Center*, 70 USPQ2d 1827 (Fed. Cir. May 13, 2004).

In this case, MISHIMAGI discloses a vehicle rearview mirror assembly including a housing 22 and a mirror 18 disposed on the backside of the housing 22. The mirror assembly further include a lamp assembly 23 having light guiding member 26 with a plurality of LED 27 positioned within a void defined by the light guiding member 23. See Figure 1 and 3 of MISHIMAGI.

At least one of the LED in the patented structure of MISHIMAGI is clearly shown as located fully within the void of the light guiding member (see Figure 1, element 27b) and, as such, was broadly considered to be disposed in the light guiding member.

19. In response to applicant's argument that the teachings of MISHIMAGI and SOMMERS provide no suggestion to combine, the applicant is advised that suggestion or motivation to modify a prior art structure can be found in a reference, or reasoned from common knowledge in the art, scientific principles, art recognized equivalents, or legal precedent. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In addition, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In this case, as detailed in previous section 8, using the LED of SOMMERS in the rearview mirror assembly of MISHIMAGI, would have flown naturally to one of ordinary

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skill in the art to simplify such rear view mirror assembly by eliminating the need for an additional support portion perpendicular to the light guiding member (as seen in Figure 1 of MISHIMAGI).

20. In response to applicant's argument that combining MISHIMAGI and SOMMERS as proposed would require substantial structural modification of the patented structure of MISHIMAGI, the applicant is advised that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). First, it is noted that the modification proposed by the Examiner is not replacing all of the light emitting elements of MISHIMAGI (i.e. both LED 27a and LED 27b), but only the light-emitting element disposed perpendicular to the rest, that is, LED 27b. As previously stated, using the LED of SOMMERS in the rearview mirror assembly of MISHIMAGI, would have flown naturally to one of ordinary skill in the art to simplify such rear view mirror assembly by eliminating the need for an additional support portion perpendicular to the light guiding member (as seen in Figure 1 of MISHIMAGI), such modified structure being different from the patented device of MISHIMAGI in neither functional capabilities, nor mode of operation.

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21. Regarding the Examiner's rejection of Claim 14 under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of YAN (U.S. Pat. 5,865,529), the applicant argues that the cited combination references fail to individually disclose, or even suggest when combined, all the features of the claimed invention, specifically MISHIMAGI not disclosing a reflector including a reflection surface which allows light plane-radiated from the LED to be reflected. The applicant further argues that there is no motivation in the Prior Art to combine the cited references. The applicant even further argues that replacing all of the light sources of MISHIMAGI with the LED of SOMMERS, as supposedly proposed by the Examiner, would require substantial structural modification of the patented structure of MISHIMAGI, and would destroy the MISHIMAGI reference by rendering inappropriate for its intended use.

22. In response to applicant's arguments that MISHIMAGI and SOMMERS failed to disclose individually, or suggest in combination, a reflector including a reflection surface which allows light plane-radiated from the LED to be reflected, the applicant is respectfully directed to Figure 1 of MISHIMAGI, where a lamp cover 23 is disclosed. Lamp cover 23 includes a cover section 26a, which receives light from the LED 27b through a section 26c. Light from the LED 27b is transmitted inside the section 26a until it is reflected out of the cover 26, by the concavities and convexities formed on the inner surface of the section 26a (see column 3, lines 52-61).

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23. In response to applicant's arguments regarding the rejections made over MISHIMAGI and YAN, the applicant is respectfully directed to sections 17-20, where such arguments were previously disclosed, as they apply to Claim 5.

24. Regarding the Examiner's rejection of claims 6-13, 24, 25 and 27 under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of SOMMERS (U.S. Pat. 6,674,096), the applicant presents no arguments, except stating that such claims depend directly or indirectly from independent claims 5 or 26, and would be allowable when/if the independent claims are allowed.

25.

26. Regarding the Examiner's rejection of claims 15-23 under 35 U.S.C. 103(a) as being unpatentable over MISHIMAGI (U.S. Pat. 6,769,798) in view of YAN (U.S. Pat. 5,865,529), the applicant presents no arguments, except stating that such claims depend directly or indirectly from independent Claim 14 and would be allowable when/if the independent claim is allowed.

Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negron whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee, can be reached on (571) 272-7044. The facsimile machine number for the Art Group is (571) 273-8300.

28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.


Ismael Negrón
Examiner
AU 2885